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What is claimed is:

- 1. A X-ray film cassette device comprising in combination: a rectangular cartridge body having a front wall, a pair of side walls and a back wall; a rectangular cover hinged at one side thereof to the back wall of said body by means of a pair of hinge means; a pair of latch means provided at one side of said cover opposite to the hinged side, said latch means being manually operable to be moved from a latching position to a released position; a pair of slots provided in the front wall of the body to be engaged with said latch means of the cover; at least two imaging plates for recording an image generated by an x-ray source; said at least two imaging plates overlapping so as to prevent the loss of diagnostic information.
- 2. The cassette of claim 1, wherein said at least two imaging plates can be processed by a computed radiography reader without manually removing imaging plates from cassette.
- 3. The cassette of claim 1, wherein said system works in a FCR 5000 CR Reader imaging device.
- 4. The cassette of claim 1, further comprising indicia marks on said imaging plates such that said imaging plates can be automatically aligned.
- 5. The cassette of claim 1, wherein said at least two imaging plates are separated by a

 Z' fold of material sufficient to prevent said overlapping image plates from

 coming into direct contact with each other.

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- 6. The cassette of claim 1, wherein said imaging plates are 14" x 17" in dimension.
- 7. X-ray film that can be used in the cassette device of claim 1.
- 8. A photostimulable phosphor sheet that can be used in the cassette device of claim 1 5
 - 9. The x-ray images generated by the use of the cassette device of claim 1.
 - 10. The cassette of claim 1, wherein said system works in any Fuji CR Reader imaging device.
 - 11. A X-ray cassette device comprising in combination: a rectangular cartridge body having a front wall, a pair of side walls and a back wall; a rectangular cover hinged at one side thereof to the back wall of said body by means of a pair of hinge means; a pair of latch means provided at one side of said cover opposite to the hinged side, said latch means being manually operable to be moved from a latching position to a released position; a pair of slots provided in the front wall of the body to be engaged with said latch means of the cover; at least two imaging plates for recording an image generated by an x-ray source; on a photostimulable phosphor sheet said at least two imaging plates overlapping so as to prevent the loss of diagnostic information.
 - 12. The cassette of claim 11, wherein said at least two imaging plates can be processed by a computed radiography reader without manually removing imaging plates from cassette.
 - 13. The cassette of claim 11, wherein said system works in a FCR 5000 CR Reader imaging device.

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- 14. The cassette of claim 11, further comprising indicia marks on said imaging plates such that said imaging plates can be automatically aligned.
- 15. The cassette of claim 11, wherein said at least two imaging plates are separated by a "Z' fold of material sufficient to prevent said overlapping image plates from coming into direct contact with each other.
- 16. The cassette of claim 11, whereip said imaging plates are 14" x 17" in dimension.
- 10 17. X-ray film that can be used in the cassette device of claim 11.
 - 18. A photostimulable phosphor sheet that can be used in the cassette device of claim 11.
- 15 19. The x-ray images generated by the use of the cassette device of claim 11.
 - 20. The cassette of claim 11, wherein said system works in any Fuji CR Reader imaging device.